PLANNING AHEAD

Notes for the Planning Community

Volume 2, Issue 8 September / October 1999

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Notes from Jim Johnson

The HQUSACE and MSC planning chiefs, hosted by LRD, met during August 31- September 2 as a part of their initiatives to improve the civil works program. These initiatives are aligned with the Corps Plus goals as follows: PEOPLE: Invest in People; PROCESS: Revolutionize Effectiveness; and PROGRAM: Seek Growth Opportunities.

On the first day, the MSC planning chiefs presented their planning initiatives in support of the civil works program. Although each presentation was unique, the presentations shared the common topics of people, process and program improvements. The presentations and exchange of information were characterized by high energy and ideas that could be applied Corps-wide.

During the second day, the participants split into three groups (people, process, and program) to synthesize information presented on Day 1 into specific action plans. The small groups met in the morning and

presented results for discussion by the whole group in the afternoon. Subsequently, PowerPoint presentations were prepared for BG Van Winkle (DCGCW) on the third day. The key points from these presentations were:

PEOPLE

Align planning to work more effectively with PM as part of the Project Management Business Process.

Organizationally, Planning can build the program as a separate organization. However, if combined, it would be more effective as a separate and distinct organization within PM, rather than Engineering or DETS.

Planning capability is severely eroded. Initiatives were proposed to improve hiring, training, and retention of planners in support of Civil Works program development.

PROCESS

A draft copy of the streamlined planning guidance was distributed for MSC review and response. We will publish this seventy-five-page document by the end of the calendar year.

A draft copy of the Continuing Authority regulation was also distributed for MSC review and response. The MSC planning chiefs welcomed the delegation of authority to the field. The regulation is scheduled for final distribution by the end of the fiscal year.

Several initiatives were developed that will reduce time and cost during the planning phase, including a tool kit approach to expand MSC and District options to carry out reconnaissance and feasibility studies more expeditiously.

PROGRAM

The MSC Planning Chiefs developed specific proposals to expand the Civil Works program into the areas of water supply, watersheds, and water-related urban revitalization. The proposals include identification of prototype projects in each MSC, and proposed legislation where necessary to support these new initiatives.

On September 2, General Van Winkle met with the MSC planning chiefs, presenting his views on the importance of growing the civil works program, the project management business process, and the need for bold new initiatives in civil works, with particular focus on watersheds and on water supply initiatives. In addition, he stated his interest in reducing the time and cost of planning studies while maintaining a solid foundation to get good value for the taxpayers' dollar.

Although a substantial amount of effort will be required to build the civil works program, the planning chiefs are enthusiastic about taking on this task. The planning chiefs and I are committed to assuring that this energy permeates the organization, so we can achieve our ambitious goals. 

A Word from the Editor

Harry Kitch – CECW-PD

CORRECTION: In an article in the July Planning Update, the Duwamish-Green project was incorrectly referenced as a Portland District product. Actually, the project is in Seattle District and Noel Gilbrough, NWS, submitted this nomination. Congratulations to Seattle District and to Mr. Gilbrough for being having the Duwamish-Green River selected as one of only 12 showcase Stream Corridor Restoration Projects nationally.

Recent Navigation Data Center Services Supporting District Navigation Studies

Arlene Dietz – CEWRC-NDC

This monthly report on Navigation Data Center's (NDC) statistical and data services rendered to Corps offices for planning navigation projects is intended to let the broader Corps family know what services are being provided to support the Corps navigation mission, particularly planning studies.

Infrastructure

The New York District planning team studying the navigation requirements for New York / New Jersey channels and ports inquired of NDC two years ago about accelerating our schedule for surveying the area's commercial maritime facilities and connecting transportation links. NDC adjusted the schedule for updating the database, which covered the region of interest. The survey was completed in record time and the data were provided to the District study team by early summer. Summary data for Port Series No.5, the Ports of New York, NY and NJ and Ports on Long Island, NY is available on the NDC web site and the printed report will be distributed as soon as it is received from the printer.

If any district is scheduling a navigation feasibility study requiring detailed port facility information, including locations, structures, depth of water at the berths, handling equipment, commodities served and etc. you should contact NDC at least one year in advance, so the survey can be scheduled. Historic facility data from l922 is also available in NDC archives. For further information contact Virginia Pankow, Chief of the Port and Waterway Infrastructure Division at 703-428-9047

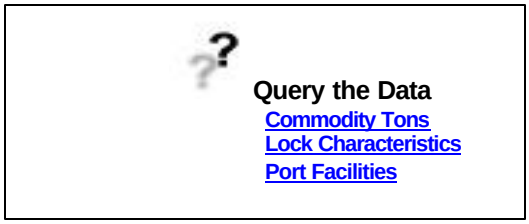
Commerce

The New York team called in September 1999 to obtain the monthly distribution of tonnage, both total and containerized, foreign and domestic for the years l996 through 1998 for a single channel, Newark Bay Channel. They needed this to establish the historic monthly flow patterns of truck traffic from the serviced facilities. NDC could meet their needs. When a query such as this one requires little NDC time, the requesting district is not charged, however, if a time-consuming program must be written the district will be asked to cover costs. If you have a need for waterborne commerce statistics or data beyond that which is included on our public internet site [www.wrsc.usace.army.mil/ndc], contact Thomas Mire, Chief of the Waterborne Commerce Statistics Center's Quality Control, Products and Services Office at 504-862-1410.

"Click for Navigation Charts"

Bob Baldwin, CEWRSC-NDC

To assist Corps customers, the Navigation Data Center (NDC) has created a clickable index map on NDC's web site (http://www.wrsc.usace.army.mil/ndc/navindexmap.htm). This map has links to the district and, if available, the navigation chart page in the district. If no chart-ordering page exists NDC points them to the main district page.



Web-based Interactive Tools for Locks and Port Facilities

Bob Baldwin, CEWRC-NDC

New interactive links for locks and port facilities are now online at the Water Resources Support Center's Navigation Data Center (NDC) web-site: http://www.wrsc.usace.army.mil/ndc/. Click on one of the 3 selections under the heading Query the Data:

By selecting a river and then a lock, detailed commodity tonnage is available for any of the last 5 years. Results from this query include: Year, River, River Mile, Lock Name, Chamber, Direction, Sum of Tons, Sum of Barges, Commodity Code, and Commodity Description.

Other information about the physical attributes of locks can be retrieved in a similar manner from the lock characteristics online query link. Choose from three separate lock queries to list either: lock and channel dimensions, characteristics of the lock structure and surrounding pool, or points of contact.

And, summarized information about each of the nearly 10,000 port facilities, surveyed by the Navigation Data Center, can be accessed through a GIS clickable map. A national map displays all of the port facility locations. Click on any location to zoom in and display the port facility's location in relation to waterways, county names, cities, interstate highways, and streets. Select the *Info* button at any time and click on a port facility to list detailed information such as: port, latitude, longitude, waterway, mile, bank, name, location, datum, operator, owner, address, town, state, railway connection, purpose, depth alongside, total berthing space (feet), commodities and remarks. In the near future, digital photos of selected port facilities will be available as new field surveys are completed.

Inland Waterways Trust Fund: Status and Outlook

David Grier, Navigation Analysis Division, Institute for Water Resources

The U.S. commercial towing industry using Corps-maintained inland waterways currently pays a fuel tax of 20 cents per gallon. These tax revenues are deposited in the Inland Waterways Trust Fund, which is used to pay half the cost of new lock and dam construction and major rehabilitation. The Trust Fund was authorized in 1978 and the first use of its funds occurred for new locks authorized by WRDA '86. The fuel tax was initially 4

cents per gallon. The '78 and '86 Acts provided for incremental increases in the tax to the present 20-cent level. Beginning in 1993, the commercial towing industry – along with other transportation modes -- also has paid a 4.3-cent "deficit reduction tax" into the General Fund. (With the Federal budget coming into balance, the towing industry has called on Congress to either repeal this tax or redirect it into the Trust Fund. The president vetoed a recent tax package that included repealing the 4.3-cent tax.)

The '86 Act also established the Inland Waterways Users Board to give shippers and carriers a voice in prioritizing Trust Fund expenditures. The Users Board typically meets two or three times a year and submits an annual report on waterway investment priorities to the Secretary of the Army and to Congress. As part of the USACE support to the Users Board, the Institute for Water Resources (IWR) tracks revenues and outlays from the Trust Fund and reports on the status of the fund at each Users Board meeting. What follows are some highlights of IWR's Trust Fund analysis prepared for the Users Board's 3 November 1999 meeting in Washington, D.C.

Although the Department of Treasury's final audit for FY 99 is not yet available, Trust Fund revenues collected in FY 99 are expected to total about $104 million, plus another $16 million in interest earned on the balance. Trust Fund revenues dipped to about $96 million in both FY 97 and FY 98 from a peak of $108 million in FY 96. The revenue fluctuations correlate with variations in the U.S. grain export market. Over half of U.S. grain exports – particularly corn and soybeans – depend on the inland waterways. These are largely long haul movements from the Upper Midwest. Such movements consequently burn more fuel and thus generate more tax revenues per ton than most other commodities. Waterway grain movements have been up about 20% over last year even as total traffic has declined by about 5% (largely due to a decline in coal movements).

The 8% increase in revenues in FY 99 leaves the Trust Fund flush with cash, with an estimated year-end balance of about $378 million – the highest since the fund's inception. The balance has been creeping up each year since 1992, when the year-end balance was $187 million. Annual spending on the inland waterways peaked in FY 1991 during the height of construction activity on projects authorized by WRDA '86. Although subsequent WRDAs have authorized over $3 billion in new lock projects in addition to the $2 billion authorized in WRDA '86, new construction outlays from the fund averaged only $78 million annually between 1993 and 1999 – about half the 1991 peak.

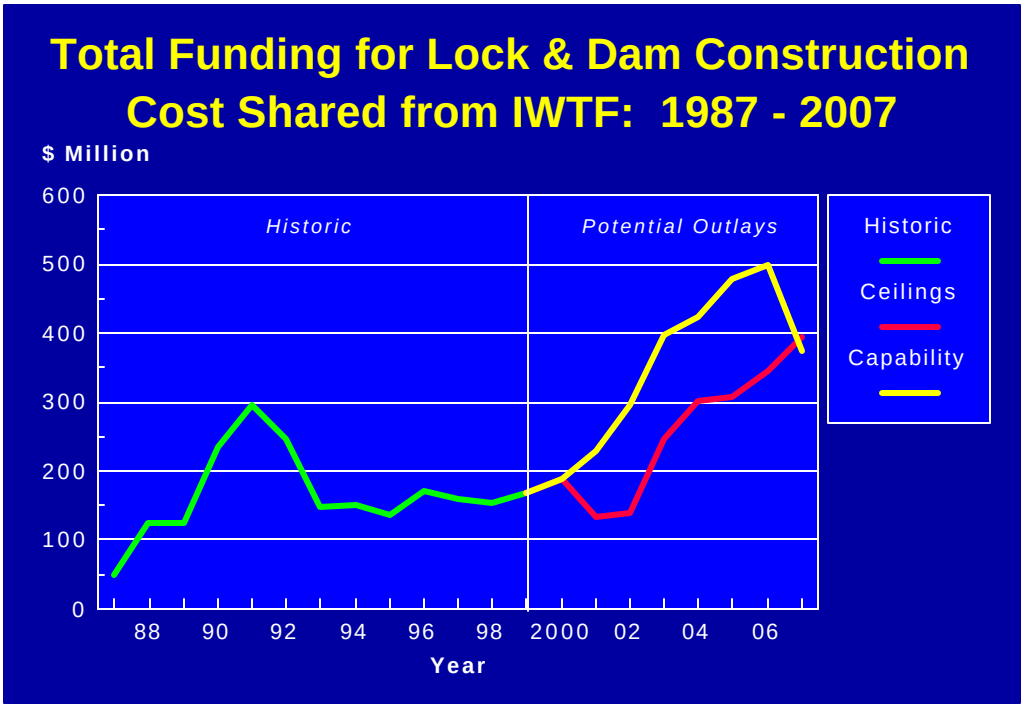
Initially the decline in outlays was largely attributable to the winding down in construction of the first wave of projects authorized by WRDA '86. But since 1995 the effort to balance the budget – and more recently the impact of budget ceilings on domestic discretionary spending – have constrained construction outlays for inland navigation even as the number of projects in the queue continued to grow. To accommodate the budget ceilings, project construction schedules for waterway projects have been lengthened and new starts have been postponed. At the same time, the reduced level of outlays has allowed the Trust Fund balance to grow by an average of $30 million per year since 1994.

If the current level of budget ceilings remain in place, Trust Fund outlays for inland waterway construction will be constrained through 2002 and only then begin to ramp up. However, new starts will still likely be postponed until still later in the decade. Under this scenario the revenue flowing into the fund would exceed Trust Fund outlays, and the balance would continue growing, reaching over $570 million by 2003.

However, the Corps is attempting to grow the program by funding inland waterway construction up to capability levels. If realized, outlays for lock construction could jump by about 60%, averaged over the 2001-06 time frame. Under this scenario the increased outlays for ongoing construction and candidate new starts would begin to draw down the Trust Fund balance from a projected peak of $420 million in 2002. Beyond FY 2002 such spending levels would continue to draw down the Trust Fund, with the surplus eliminated by 2007. This

would constrain subsequent outlays to the level of annual revenue receipts – expected to be about $120 million annually under the present 20-cent per gallon tax rate.

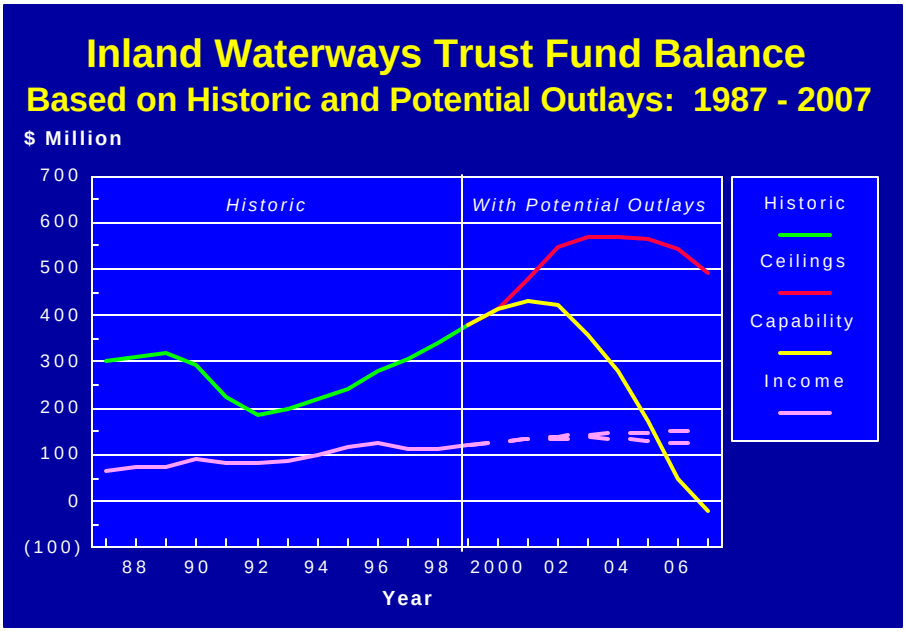
The following charts illustrate these two future Trust Fund scenarios. The first chart shows potential outlays under budget ceiling and capability scenarios, based on ongoing projects and likely new starts. The second chart shows what happens to the Trust Fund balance under each alternative.



Clearly, if the budget ceilings and/or the priority of waterway spending are not increased the Trust Fund balance will continue to grow and transportation benefits will be foregone as construction schedules are stretched out. At the other extreme, a sustained increase in annual spending on waterway projects at capability levels, while highly desirable and economically efficient, would draw down the fund balance in less than a decade. By the year 2007 the Trust Fund, rather than budget ceilings, would constrain new inland waterway investment.

Although it is impossible to predict with any certainty what levels of funding will ultimately be budgeted, these scenarios highlight the serious financial challenges associated with the timely modernization of the system. It is just as clear that future needs are growing as the system ages and traffic increases. We currently have a $3 billion inventory of authorized new construction and major rehabilitation projects already programmed over the next decade. This large portfolio of needed waterway projects will further swell upon the completion of the ongoing USACE systems studies on the Upper Mississippi River and Illinois Waterway, Ohio River, GIWW, and Black Warrior –Tombigbee Rivers. The Upper Miss / Illinois Study alone is poised to add perhaps $1 billion in new project recommendations to the construction queue, and at least some of this work will need to be integrated into the current 10-year budget program. The Ohio Mainstem Study is likely to recommend nearly $400 million in lock extensions on an interim basis perhaps another $1 billion in new

construction through 2020 and beyond. These modernization needs are real. The Corps has stewardship of an aging inland navigation infrastructure that is a vital component of the nation's commercial transportation lifeline. We have the responsibility and the challenge to recapitalize our inland waterway investment in order to efficiently and effectively meet the nation's transportation needs in the next century.



POD's Initiatives to Improve Planning Activities

Bong S. (Paul) Yoo

POD had been operating with one dual-hatted Civil Work Planning Chief and one staff Planner/Engineer at the GS-13 level the past year. POD has recently hired a GS-14 Planner to supplement its Civil Works Planning program. A GS-13 Economist position has been approved and the job description is currently being developed with projected recruitment in FY2000. We hope to expand POD's planning staff or more closely partner with other Divisions to share resources.

We have requested assistance from HQUSACE for our one Planner/Engineer at POD. We enabled our Planner/Engineer to obtain knowledge and network with other Planners by attending regional and national meetings, workshops, and conferences. We have continued to solicit support from POD PPMD, other Divisions and HQUSACE. We have developed a POD-wide matrix of Civil Work expertise so that resources and expertise can be shared among our districts. In light of limited growth in our Division resources, we plan to expand the POD-wide matrix to include other Divisions and their Districts.

Both Districts (POA & POH) have reorganized to have a Civil Works Program and Project Management entity and a Civil Works Technical entity. The Districts are on a learning curve as they implement their project management business processes in executing the program. POD is monitoring the district's progress in program execution and share lessons learned in order to enhance execution. In the past, we have monitored our Districts performance in meeting their Civil Works CMR goals. POD is developing regional metrics to examine whether the districts are implementing their QMP and project management business processes.

We have made "growing the civil works program" one of the POD Campaign Plan initiatives. POD and our districts have proposed ideas for growth. We have taken an active role to assist our districts in national and regional programs such as the American Heritage River Initiative, Coastal America, etc. We are planning to explore the proposed ideas to grow the program through a POD Civil Works Summit scheduled during 17 - 19 Nov 99. Some of the examples to grow the program are highlighted below.

- Work with HQUSACE to reinvigorate some of the Corps' traditional missions that have been rendered low priority by previous administrations such as the water supply and recreation missions or explore non-traditional initiatives such as water resources infrastructure redevelopment.

- Allow districts to share successes (and failures) as learning experiences to find innovative ways to do business or expand the Corps' capabilities.

- Work with HQUSACE to facilitate districts' participation in presidential initiatives to assist other agencies in watershed planning and ecosystem restoration. 🕮

SWD Planning Initiatives

Bill Pearson- SWD

We, in the Southwestern Division, have focused our strategic thinking over the past year on the Corps goals - Revolutionize Effectiveness (Process); Seek Growth Opportunities (Program); and Invest in People (Planning Capability). Several initiatives have been undertaken to improve our ability to deliver quality planning products in a timely manner, including but not limited to the following:

* Under Process: We are updating our previously published CAP Management Plan. We are refining our QA Plan to focus more on quality products, as opposed to process only, and with PM, we are developing guidance to the Districts on process changes required resulting from recent authorities delegated to the MSC's.

* Under Program: We are working with PM in the development of a Legislative Program Primer, including District workshops, to provide training to PM and PL employees on this important program growth function. We have teamed with PM in re-energizing the GI New Start Program, working with local sponsors and Congressional staffs. We have vigorously promoted the Environmental Restoration Program.

* Under Planning Capability: We have completed an initial inventory of planning skills, by discipline, by District, with the intent of keeping it on a Division-wide data base to assist Districts in the sharing of resources for Regional Teaming purposes. In the last year, we conducted a successful 2-day Introduction to Planning Workshop, in our Galveston District, for our young planners, PM's and key customers. The training and retention of our planning workforce remains a key focus area at each of our QA and Command Inspection District visits. 🕮

Planning Initiatives in Mississippi Valley Division

Buddy Arnold - CEMVD

MVD has taken several initiatives to streamline and improve the planning process. We have encouraged districts to submit candidates for "fast track" studies. The idea is for studies that can utilize streamlined or shortcut procedures due to simplicity of the proposed projects, existing data that could be updated, etc., that there would be some deviation from normal procedures to save time and money. In response, several districts submitted proposals, and we got approval from HQUSACE to use the expedited procedures. The concepts ranged from going directly from reconnaissance to PED to simplified economic analysis.

Concerning the overall planning process, we developed a concept for a two-year "authorization report" that would take the place of our current two-phase reconnaissance/feasibility process. We further proposed that such efforts be funded 100 percent Federal, that the criteria for cost increases under Section 902 of WRDA 86 be raised from 20 percent to 30 percent, and that approval for cost increases be at the committee level than with Congress. This would allow greater risk to be taken in doing planning analyses, so that studies could be done in a shorter timeframe. In addition, PED cost sharing would be increased from 25 percent to 50 percent. As you would expect, this would involve both legislative and policy changes to implement. Current legislation requires the two-phase process and cost sharing for the feasibility phase. Policy procedures would have to be changed to allow greater risk to taken in such areas as economic analysis to allow for a shorter study period. This concept was presented at the recent Planning Chief's meeting in Ohio.

Since MVD has merged our planning and program management functions in one organization, we have needs to train both project managers and planners for their new responsibilities in both areas. To accomplish that, we developed two short courses--Planning for Project Managers and Project Management for Planners. These were both three-day courses and utilized some existing information from prospect courses along with the knowledge from experienced personnel in our districts. Both courses were presented once and feedback was very positive. We are considering offering the courses again next FY. 🕮

Help With Cost Sharing Agreements

Ellen Cummings – CECW-PD

For five months this last spring and summer, I was on loan to CECW-AR working on review of cost share agreements. I'd like to share some observations and encourage everyone to do what you can to facilitate the process. I also recommend that you consider working there as a developmental assignment. It is a real learning experience. It is easy to complain about problems when it comes time to get cost sharing agreements approved, but the actual number of individuals trying to resolve these issues at HQUSACE has gone down while the workload has significantly increased. Did you know that there are only two staff members working on these agreements full time? At present these individuals are being helped by a review team member who is acting as an agreement review manager while still doing some report review work. Two members of the Office of Counsel staff handle all the agreements but also must review reports and work on other assignments from the Chief Counsel. Depending on the nature of the action additional members of the review team may include policy environmental staff, members of the project review staff, and representatives of Programs, Engineering and the Real Estate Directorate.

I've used the term "cost share agreements" not PCAs because PCAs for construction of authorized projects are only part of this office's workload. During the 5 months I handled about 25 agreements, including

MOUs, section 215 agreements, design agreements and PCAs for continuing authorities projects. The number used in CMR is only the number of PCAs for authorized projects that were executed and the actual number for FY 99 was 66. That number doesn't include all of the PCAs for authorized projects reviewed but not executed nor does it include all the other types of agreements. The total number of agreements handled in FY 99 was 161. Even this number does not reflect the hours of effort the staff put into working on new and revised model agreements.

The review team has reasonable targets for review given this workload and the complexity of many of the issues. The target for providing comments, approving the agreements, or forwarding to ASA (CW) as appropriate, is about four weeks after receipt of the complete PCA package. If changes to the agreement are required the marked up PCA is transmitted to the field for recoordination with the sponsor. Once an agreement acceptable to all parties is developed it is sent to ASA (CW) for approval. While Districts are encouraged to request approval for the District Engineer to execute agreements, recently ASA (CW) has rarely granted approval. PCAs for the Continuing Authorities are the exception. Deviations from the models for these agreements do not have to go to ASA (CW) for approval and District Engineers may sign the agreements after approval of the PCA by HQUSACE.

What can you do to facilitate this process? Submit complete packages. If you have a question call ahead and ask what you should send. Use model agreements with absolutely no changes whenever possible. If there are deviations to the model clearly explain them and if there are precedents include the name of the project and date. (A copy of letters or other supporting documentation doesn't hurt.) A deviation that was previously approved must still be approved the next time it is proposed. Policies and/or preferred wording may have changed since the last time the deviation was approved. If nothing has changed and the package submitted is complete, CECW-AR will try to expedite processing of this type of request. Proof read the agreements. Make sure the title of the sponsor's representative in the fist paragraph is the same as the title in the signature block. Send an electronic copy of the agreement at the time the hard copies are submitted. CECW-AR has an electronic system that allows tracking of various versions of the document and review by the staff. Be sure that the appropriate individual signs the checklist. Complete the checklist in an informative manner that clearly describes the project and the cost sharing issues. The checklist is sent to ASA (CW) with the agreement and provides a quick summary of the project. Be sure the cost estimates in the checklist are at current price levels and interest rates and that the numbers agree with the numbers in the agreement. The environmental compliance must be complete. The ASA (CW) is taking a relatively hard line on this issue. So why send a report also? The report is used to insure that any extra items of local cooperation have been included in the PCA. It may also be checked if there are questions about allocation of costs or project descriptions. Finally, please remember that yours is not the only agreement under review. Allow adequate time for review and coordination with ASA (CW). Everything cannot be a number one priority.

What is the PCA review staff doing to help you? They put on the PCA PROSPECT course to go over the basics. They participate in regional meetings to provide insights and answer questions. They are working on additional model agreements and revisions to out of date models. They are available to discuss issues before you send in a package. If you have questions about comments, revisions, or the process give them a call. The representatives of Counsel have frequent telephone conferences with sponsors and districts to discuss issues. Kim Smith is currently the team leader of the review staff and she can be reached at 703-428-6234, if you have any questions. 

A New Partnership For the Corps: The National Fish and Wildlife Foundation Case Study #1: Snake River Demonstration Project, WY

Second in a Series

Cheree Peterson - National Fish and Wildlife Foundation (peterson@nfwf.org)

The National Fish and Wildlife Foundation (Foundation) is excited by the possibilities of working with the U.S. Army Corps of Engineers' (Corps) as the Corps fulfills its environmental mission. Since the Corps has a variety of authorities that coincide with the Foundation's mission of conserving fish, wildlife, and plants, the Foundation hopes to support the Corps' restoration work (please see the previous newsletter for background on the Foundation).

One model partnership between the Foundation and the Corps is the Snake River Restoration Demonstration Project. Located near Jackson Hole, Wyoming in Teton County, the Teton County Natural Resource District (District) contacted the Foundation when the District and Teton County were in the third year of cost-sharing a feasibility study (Jackson Hole Environmental Restoration Study) with the Corps' Walla Walla District to restore riparian and wetland habitats. This area of the Snake River is one of the few remnant strongholds for the native Snake River Finespotted Cutthroat trout, and supports active Bald Eagle and Osprey populations, along with four other endangered species: the gray wolf, grizzly bear, whooping crane, and peregrine falcon.

In the course of the study, the District and the Corps decided it would be highly useful to do a demonstration project to determine the effectiveness of some of the "tools" of the project. These "tools" included debris fences and removal of aggraded bedload materials from the historic river channel; all of which had never been tried in a high velocity riverine environment. The Foundation supplied a $40,000 grant to construct the demonstration project, which the District matched with $50,000 in funds and in-kind services. The Corps provided oversight of construction, survey work, and technical assistance to the District.

As a result of the project, the District and the Corps determined which "tools" performed well and which "tools" needed improvement. The Corps incorporated the results into the draft feasibility study. Without Foundation support, the District believes the demonstration project would not have occurred, which could have decreased the effectiveness of the overall project.

This successful partnership between the Foundation and the Corps represents one wonderful model for effective partnership between the Foundation and the Corps. I encourage Corps staff to contact the Foundation in situations where demonstration projects will result in an improved feasibility study. In certain instances, the Foundation may also give grants to support the local cost-share of a Corps' project, which will be the subject of the next case study.

Innovative Use of the Planning Assistance to States Program - Value Engineering

Frank Vicidomina - CEMVN

The New Orleans District has discovered another innovative use of the PAS program – value engineering services for local governments. This service, provided to the city of Baton Rouge, has resulted in V-E

recommendations which could result in significant cost savings for the City/Parish of well over $100 million. In addition to providing the city with suggestions to save money, the V-E study strengthened Corps-local sponsor relationships and could pave the way for the Corps to participate in the design and construction of this and other environmental infrastructure projects. This is another example of how the Corps, using the PAS program as an entry vehicle to the community, can work with a local sponsor for great benefit to the sponsor as well as other Corps programs such as Support for Others and the Continuing Authorities Program.

The specifics of the New Orleans District study are as follows. The city of Baton Rouge asked the New Orleans District for Value Engineering assistance for their draft design on a $500 million Sanitary Sewer Overflow Corrective Action Plan. The City/Parish desired an independent analysis for the purpose of validating the plan design and to identify possible cost saving and/or project improvement modifications. Under the Planning Assistance to States Program, the City/Parish executed a cost-sharing agreement with the New Orleans District. A primary study team of approximately 20 participants was led by the Corps Headquarters Value Engineering Study Team. Team members included staff from the City/Parish Department of Public Works, the New Orleans District, and A/E consultants of both the Corps and City/Parish.

Two, one-week V-E study workshop sessions were conducted in April and July of 1999. The study efforts were successful in both validating the soundness of the Draft Plan and identifying a number of cost-saving and project improvement proposals, for significant potential savings as mentioned above.

As used in this case, the V-E methodology has the potential to save millions of dollars. The PAS study can be executed for a relatively small study cost and quick execution time (V-E study costs usually range from $30 -$80 thousand and are usually complete in 5 –6 weeks). Using the PAS program to initially bring the Corps in on a V-E or similar effort appears to be an excellent way to build relationships and start our involvement in these projects.

For more information on the use of V-E via the PAS contact: Mr. Frank Vicidomina, Corps New Orleans District V-E Officer @ (504) 862-1251, e-mail: *frank.vicidomina@mvn02.usace.army.mil.* 🕮

Planning Assistance to States - Kivalina, Alaska

David Williams, Alaska District

I am seated in the back seat of a single-engine airplane flying north. The seat next to me has been removed to accommodate 'bypass mail' that consists of cases of soft drinks. The mesh cargo net over them has been buckled and tightened to 'D' rings in the floor and wall. Still, they shift slightly as the small craft bucks and bounces with the stiff Siberian wind blowing snow across the frozen Chukchi Sea. Lights, telephone poles and house shapes appear through the veil of snow as the half-light of an arctic winter outlines the snowdrifts behind each structure. As the pilot banks to look at the wind sock I see an old DC-4 grotesquely positioned near the end of the runway, where it has sat since removal of two engines. The last run of that venerable aircraft was to bring fuel to Kivalina.

Kivalina is an Inupiat Eskimo village of about 350 souls, innumerable whalebones and one wrecked aircraft. Kivalina is situated on the west coast of Alaska about 80 miles north of the Arctic Circle, 185 miles from Russia, and 650 miles from Anchorage (where I started this morning). The town-site is subject to erosion on both the inland lagoon side and the sea beach of the narrow barrier island where it sits. Calculations indicate that storm swell could over-top the island. The residents of Kivalina have considered relocation for many years. Relocation would provide safe building sites; continue to allow access to the Chukchi Sea and the Kivalina and

Wulik Rivers for subsistence hunting and fishing, and provide for modern infrastructure development. Modern infrastructure for Kivalina includes most of what Americans take for granted every day: school, electrical power, water, sewer, and solid waste facilities, telephone, fuel oil for heat, and gasoline for snow machines, four-wheelers and outboards. The residents of Kivalina rely heavily on subsistence gathering for living. Studies have shown a per capita usage of bear, whale, walrus, seal, caribou, moose, fish, berries, and greens gathered from the wild averages about 700 pounds per year for Kivalina. This traditional lifestyle melds with diesel generators, modern school facilities, and satellite television dishes. Still, Kivalina has running water and flush toilets in only the school facilities and the laundromat. Housing is crowded with up to a dozen people living in a three-bedroom house. Needs and deferred maintenance have grown as this community anticipates relocation.

The US Army Corps of Engineers completed the Community Improvement Feasibility Report for Kivalina, Alaska in April 1998. This report recommended actions for providing for the needs of Kivalina. A subsequent vote of the village identified the most popular option – 66% of the vote, which includes relocation to a site 3 miles upstream on the Wulik River. A June 1999 Planning Assistance to States agreement provides the basis for multi-year planning assistance to develop and orchestrate projects and activities that will provide the needed community improvements. This work includes a five-year plan that will plan the transportation, infrastructure and community requirements of the village. The work centers on community involvement to identify the issues that provide Kivalina with positive strength and need to be continued, as well as those that presently hurt Kivalina and should be reduced as much as possible. The actual projects that are planned are expected to be implemented through a variety of coordinating agencies: Alaska Department of Transportation and Public Facilities for airstrip and roads, Alaska Native Tribal Health Consortium for water, sewer and solid waste development, Bureau of Indian Affairs for housing pads and in-village roads, USDA Rural Development for grants-in-aid for most of the infrastructure needs, various housing authorities for relocation and new construction of housing, the Northwest Arctic School District for relocation and reconstruction of school facilities, Denali Commission for new fuel facilities. The list goes on.

The Alaska District is in the first year of this five-year agreement. Coordination is one of the main issues. The technical tasks of planning road layout and finding borrow material; gathering data and developing a two-phase Environmental Impact Statement; identifying village needs and planning a village layout with utilities; identifying a water source, solid waste landfill site and sewage disposal area; assuring proper placement of bulk fuel facilities and airfield are all identified (with other activities) on the project schedule. The ongoing task of coordinating with the various agencies, the Borough, the village governments, and potential funding agencies is a job without an end-date. Will the Alaska District's work get Kivalina relocated? I can't answer that question. I do know that this planning work has pulled together the efforts of many agencies to the common goal of moving Kivalina. If that effort continues, this plan will be a success. 🕮

Artificial Nesting Islands for Shorebirds

Nancy Gould - CESAS

Shore birds such as stilts and terns need undisturbed beaches and marshes to build their nests. When coastlines become crowded or erode, these birds resort to unnatural habitats, such as gravel-topped roofs, to make their nests.

"This presents a problem for the least tern populations living on roofs," said Steve Calver, a biologist in Planning Division. Calver said that adult terns go back to the same place to nest every year. When populations start out on roofs, the offspring tend to look for gravel rooftops rather than beaches to build their nests. If those buildings are demolished or if roofing practices change, the birds don't know to nest on the beach. And, not finding the same type roof, they may never nest again. "This puts the species in a precarious position," said Calver, noting that naturally nesting populations of least terns are considered very important for the long-term survival of the species.

Savannah District manages seven containment areas on the South Carolina side of the Savannah River, where it deposits sediment routinely dredged from the Savannah Harbor. Large numbers of shore birds and waterfowl have used these containment areas at various times for feeding habitat, dining on exposed invertebrates and fish left behind as weirs slowly drain water out of the area. Unfortunately, the time needed to dry out the containment area is not long enough for the chicks to mature, and without water they starve or become prey to other wildlife.

Seeing an unutilized opportunity to conserve bird populations, Calver and Planning Division biologist Bill Bailey developed a wetlands mitigation plan for the project that included enhancement of wildlife values. As part of that plan, containment areas are required to hold water for longer periods (approximately late May to mid August) so that young wildlife can complete their nesting. Operations Division, who manages the dredging, agreed to begin holding water this year, before the mitigation plan is implemented, and nesting species of shorebirds have already begun reaping the benefits.

According to Alan Garrett, Operations Navigation project manager, prior to the more recent nesting crisis, the division had responded to a request from the U.S. Fish and Wildlife Service to assist shore birds. The division could easily comply as long as changes to dredging contracts had no substantial impact on costs and schedules. Now, as part of a cooperative plan with environmental agencies, the district has made avoidance a part of its operational planning in an effort to ease the shore bird crisis caused by excessive development along the Eastern Seaboard.

Because the dredged material is deposited in wetlands, the Department of Transportation (DOT), owner of the containment areas, is required by the Clean Water Act to mitigate the negative environmental impacts when wetlands are used to store dredged material. In the past, mitigation has always been off-site. The plan that Calver and Bailey developed, using the Corps' 1996 Long-Term Management Plan (LTMS), mitigates wetland impacts from a newly created disposal area (Area 14A). This plan not only requires that water be held in the containment areas for longer periods but also requires creation of two nesting islands within each disposal area.

Each island measures about 250 feet in diameter. Although four have been developed, only the two in Area 14B are being used. The two islands in Area 14A cannot be used until all mitigation requirements are met— requirements such as a study to determine if the islands are free of environmental contaminants.

According to Garrett, as much as 15,000 cubic yards of sediment and water is pumped into a single containment area (500-900 acres) daily from routine harbor maintenance. It is from this dried sediment that the islands are created.

The islands were built in the winter of 1998 while containment areas 14A and 14B were not in use. They were constructed primarily with sediment from the containment area where each is located. Bulldozers pushed dried sediment in large piles to form the islands and then topped each with sandy sediment from other parts of the containment areas for a natural sandy surface.

Ditches were dug around the two islands in Area 14A to hold the water collected from the dredging operations. But ditches were not needed around the islands in Area 14B because of the low elevation of the sites where the islands were built.

Now shore birds nesting in the containment areas have a natural water barrier around them. Their young are protected from predators and adults and their chicks have wet areas where they can feed.

Although disposal areas and artificial islands are not wetlands technically, they have already provided functional wetland benefits for the wildlife that reside there. In the first nesting season alone, Calver counted more than 100 least tern nests, more than 40 black-neck stilt nests, 20 gull billed tern nests, and 20 black skimmer nests among others on the two islands. 🕮

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Submissions Deadline

The deadline for material for the next issue is **22 November 1999**. 🕮

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